

Education Needs of Nurses Regarding Sexuality of the Elderly and the Influencing Factors

Lee, Jeoung Sil¹, *Yoo, Eun Kwang²

¹ Dept. of Nursing, Graduate school, Hanyang University, Doctoral student,
MSN, RN

² College of Nursing, Hanyang University, Professor, Ph.D, RN

*Corresponding Author

222.wangsimni-ro, Seongdong-gu, Seoul, .04763, Korea
glory@hanyang.ac.kr

Abstract

Purpose: This study is a descriptive survey research to investigate the education needs of nurses regarding the sexuality of the elderly and the influencing factors. Methods: A total of 231 subjects were included in the study by convenient sampling among nurses who were working in general hospitals or convalescent hospitals located in S city and I city from April 10, 2014 to April 30, 2014. A research tool used to collect data was a self-reporting questionnaire which was composed of 62 questions which involved general characteristics, sex-related characteristics, education needs tool developed by Kim, and sexual knowledge and sexual attitude tool modified by Park and Park. SPSS version 15.0 was used for data analysis by frequency and percentage, mean and standard deviation, t-test, ANOVA, Duncan's method as a post hoc, Pearson's correlation coefficient, and multiple regression. Results: The score of education needs, sexual knowledge, and sexual attitude of nurses regarding the sexuality of the elderly was $29.78 \pm 4.48/40$, $18.97 \pm 5.58/29$, and $39.03 \pm 5.17/52$, respectively. In general characteristics, there was a statistically significant difference in education needs ($t=2.90$, $p=.004$) and sexual attitude ($t=3.13$, $p=.002$) by gender only. In sex-related characteristics, education needs ($F=18.99$, $p=.001$; $F=27.29$, $p<.001$; $F=12.66$, $p<.001$), sexual knowledge ($F=10.10$, $p<.001$; $F=7.23$, $p=.001$; $F=4.84$, $p=.009$), and sexual attitude ($F=7.04$, $p=.001$; $F=9.53$, $p<.001$; $F=11.58$, $p=.001$) were significantly higher in the group who answered "I need sex education," "I am willing to have sex education," and "I want to maintain sexual function when I become an elderly man/woman." The education needs of nurses had a positive correlation with sexual attitude ($r=.41$, $p<.001$) and sexual knowledge ($r=.35$, $p<.001$). The factors influencing education needs were sexual attitude ($\beta=.351$), which was the most influential, and sexual knowledge ($\beta=.272$). The explanatory power of these two factors was 24% for education needs. Conclusion: During the nursing of the elderly, nurses needed to understand the sexuality of the elderly to have a positive view of their sexual needs and to provide appropriate nursing intervention in order to improve the health and quality of life of the elderly by assessing their sexual needs. To achieve this, the development of continuous and systematic education programs including assessment skills with competence and confidence based on adequate sexual knowledge and sexual attitude related to the elderly was necessary.

Keywords: nurses, sexual, knowledge, attitude, education, aged

1. Introduction

The number of the elderly aged 65 or older is currently 6,624,000 which is 13.1% of the entire population in Korea. The proportion is expected to increase to 40% in 2060 [1]. Much interest in the aging society and the elderly should then be discussed in earnest from the perspective of them having a comfortable and worthwhile life in their old age; that is to stress the quality of life, rather than simple life extension [2]. Sexuality is important in life during adolescence or adulthood and, similarly, sexuality of the elderly is crucial for their health and qualitative life [3]. Considering that healthy sex life, like physical health, is one of factors for successful aging, cognition and knowledge of sexuality of the elderly should be seriously investigated [2, 4, 5]. The importance and positivity of sexuality, and interest in sexuality for quality of life of the elderly have been suggested but the social view on the sexuality of the elderly has been distorted and is unnatural [2, 6]. Because of this, a social atmosphere, where the sexuality of the elderly cannot be easily discussed, and a shady sex life have increased the hiring of prostitutes among the elderly and the morbidity of various sexually transmitted diseases. In addition, although a demand from the elderly for sex education and counseling on sex problems are increasing, there are inadequate systems to deal with interest in sexuality and its troubles and to support the expression of a healthy sex life through proper cognition and understanding of sexuality [2, 7]. In the previous studies for the elderly [8, 9], the importance of sex education was highlighted and more than half of the elderly (61.8%) answered “Yes” for the question of intention of receiving a sex education program. This shows that the sex education needs of the elderly was significantly high.

Research findings show that internists, nurses, and psychologists sometimes neglect sex-related questions for elderly patients. Such is caused by lack of knowledge and understanding of the elderly, prejudice of health-related experts, and lack of knowledge and attitude to the sexual expression of elderly patients [2, 10, 11]. Staff members in a nursing home would get angry or express their disgust at the sexual expression of the elderly [2, 12], or tend to neglect the issue because they did not know how to deal with the sex-related questions of the elderly [2, 13].

Nurses are supposed to perform the role of an educator and a counselor to solve sexual health problems and therefore sexual health knowledge, skill, and receptive attitude are required [14]. Further, it was claimed that sex-related training and education for nurses were needed for communication on sex-related issues [15]. However, the reality of education tells that 45.5% of universities have both gerontological nursing theory and practice, and the learning contents focus on diseases of the elderly without general understanding of the elderly [16]. The sex education contents which nurses have experienced only included the structure and function of a reproductive organ, pregnancy and childbirth, and contraception, suggesting that there were no education contents related to sexuality of the elderly [17]. Hence, to figure out the basic data for the development of sex education contents and program, suitable education programs for nurses by investigating the current sexual knowledge and attitude of nurses to the sexuality of the elderly are needed to identify education needs and analyze influential factors on the subject.

2. Purpose

The purpose of this study is to investigate the education needs of nurses regarding the sexuality of the elderly and the related factors. The specific purpose is to investigate the education needs, sexual knowledge, and sexual attitude of nurses on the sexuality of the elderly; differences in education needs, sexual knowledge, and sexual attitude to the sexuality of the elderly depending on their characteristics; correlation among education needs, sexual knowledge, and sexual attitude; and influencing factors on the education needs.

3. Method

3.1. Study Design

This study is a descriptive survey research to investigate the education needs of nurses regarding the sexuality of the elderly and the related influencing factors.

3.2. Subjects and Data Collection

The subjects in the study were selected among nurses who were working in general hospitals and convalescent hospitals located in S city and I city. The researcher explained the purpose of the study and then recruited nurses who agreed on the study. The number of subjects was calculated by using G-Power 3.1 Program at $\alpha=.05$ significance level, effect size=.60, and power=.85. In the result, 240 subjects were selected by convenient sampling with consideration for dropouts and a total of 231 were used for data analysis. The data were collected from April 10, 2014 (approval date) to April 30, 2014 after the study was reviewed and approved by the IRB (HY-14-019-2).

3.3. Research Tool

A structured questionnaire, which consisted of 14 questions on general and sex-related characteristics, 8 on education needs, 29 on sexual knowledge, and 11 on sexual attitude (a total of 62 questions) for data collection was used. The tool of education needs was Kim's, developed for the elderly [2, 18] and modified for the nurses in this study. The lowest score was 16 and the highest score was 40. A higher score meant higher education needs. The tool was used after permission from Kim. The reliability of Kim's tool was Cronbach's α .92 and .91 in this study. The sexual knowledge measurement tool was based on Aging Sexual Knowledge and Attitude Scale (ASKAS) developed by White [2, 19], modified by Quinn-Krach and Van Hoozer, translated and modified by Kim [2, 20], and remodified by Park and Park [2, 21]. The tool was used after permission from Park and Park. The tool was classified into "Yes," "No," and "Neither yes nor no." A correct answer had 1 point and a wrong answer and "Neither yes nor no" had 0 point. The lowest score was 0 and the highest score was 29. A higher score meant a higher level of sexual knowledge. The reliability of White's tool was .85 (Cronbach's α) in this study.

3.4. Data Analysis

Frequency, percentage, mean, S.D, t-test, ANOVA, Duncan as a post hoc, Pearson's correlation coefficient, and multiple regression analysis were collected and then processed using SPSS version 15.0.

4. Result

4.1. General Characteristics of the Subjects

The percentages of "female" and "the thirties" were 95.2% and 31.2%, respectively, which were the highest. The percentages of "married" and "no religion" were 56.3% and 44.6%, respectively. The percentages of "community college graduates," "general hospital," and "elderly nursing home" were 56.7%, 52.4%, and 47.6%. In terms of work experience, the percentages of " ≤ 3 years" and "4-7 years" were 27.3% and 24.2%, respectively. In the characteristics of nurses related to the sexuality of the elderly, 60.6% of the subjects had "no experience of living with families of the elderly" and the most frequent route of sex education for the elderly was "university curricula," which was 42.0%. The percentages of "no experience of education," "mass media," "self-education," "Internet," "refresher courses of Korean Nurses Association," and "graduate school

curricula” were 20.8%, 17.7%, 11.3%, 3.9%, 2.6% and 1.7%, respectively. For the opinions on “sexuality of the elderly,” “There is no difference between the young and the elderly” was 38.1% and “I have never thought about that,” 25.1%. On the wish for active sexual function after they become elderly, “I don't know” was 49.8% , “I don't want” 29.4%, and “I want” 20.8%. 94.4% of the subjects did not conduct nursing assessment for the sexuality of the elderly.

4.2. Nurses’ Education Needs, Sexual Knowledge, and Sexual Attitude to the Sexuality of the Elderly

The average score of education needs was 29.78 ± 4.48 points (range: 16-40 points) and therefore the level of needs was moderate. The item with the highest score was “I want to know physical, mental, and social changes by aging” (3.90 ± 0.64) and the second was “I want to know the effect of chronic diseases on sexual function by aging” (3.88 ± 0.66). The average score of the sexual knowledge of nurses on the sexuality of the elderly was 18.97 ± 5.59 points (0-29 points). 90.5% got the right answer of “Most men aged 65 or older are not capable of sexual behavior” (0.90 ± 0.29). A total of six questions showed the percentage of correct answers to be less than 50%. The average score of sexual attitude was 39.03 ± 5.18 points (11-55 points). “I think that sex education is necessary for the elderly” was $4.12 \pm 0.78/5$, which is the highest. <Table 1>

Table 1. Nurses’ Education Needs, Sexual Knowledge, and Attitude to the Sexuality of the Elderly

Variables (score range)	Minimum value	Maximum value	Mean \pm standard deviation
Education needs (8 – 40)	16	40	29.78 ± 4.48
Sexual knowledge (0 -29)	2	29	18.97 ± 5.59
Sexual attitude (11-55)	26	52	39.03 ± 5.18

4.3. Nurses’ Education Needs, Sexual Knowledge, and Attitude to the Sexuality of the Elderly Depending on Their Characteristics

There was a statistically significant difference in education needs and sexual attitude by gender only ($t=2.90, p=.004$; $t=3.13, p=.002$). In other words, education needs were higher in men than in women, and men were more receptive to the sexuality of the elderly than women.

Among sex-related characteristics, education needs ($F=18.99, p=.001$; $F=27.29, p<.001$; $F=12.66, p<.001$), sexual knowledge ($F=10.10, p<.001$; $F=7.23, p=.001$; $F=4.84, p=.009$), and sexual attitude ($F=7.04, p=.001$; $F=9.53, p<.001$; $F=11.58, p<.001$) were significantly higher in the groups who chose “I need sex education on the elderly,” “I am willing to have sex education for the elderly,” and “I want to maintain sexual function when I become an elderly man/woman.” In other words, education needs, sexual knowledge, and sexual attitude were higher in the groups who thought that nurses needed education on the sexuality of the elderly, who were willing to have sex education on the elderly, and who wanted to maintain sexual function when they become an elderly. <Table 2>

4.3. A Correlation Among Education Needs, Sexual Knowledge, and Sexual Attitude

Education needs had a positive correlation with sexual attitude ($r=.416, p<.001$) and sexual knowledge ($r=.356, p<.001$). There was a positive correlation between sexual knowledge and sexual attitude ($r=.240, p<.001$).

4.4. Factors Influencing Education Needs

Sexual attitude ($\beta=.351$) was the most influential while sexual knowledge ($\beta=.272$) was the second most influential. These two factors had an explanatory power of 24% for education needs. <Table 3>

Table 3. Influencing Factors to Education Need

Variables	Non-standardized coefficient		Standardized coefficient	t	p
	B	Standard error	β		
Constant	13.781	2.011		6.854	$p<0.001$
Sexual knowledge	.218	.048	.272	4.581	$p<0.001$
Sexual attitude	.304	.051	.351	5.907	$p<0.001$

$R^2=.243$, modified $R^2=.236$, $F=36.520^{***}$ $***p<.001$

Table 2. Education Needs, Sexual Knowledge, and Attitude by General and Sex-related Characteristic

(N=231)

Characteristics	category	Education needs				Sexual knowledge				Sexual attitude			
		M±	SD	t/F	p	M±	SD	t/F	p	M±	SD	t/F	p
Sex	male	33.55±	5.22	2.90	0.004	21.36±	4.34	1.45	0.14	43.73±	4.20	3.13	0.002
	female	29.59±	4.37			18.85±	5.62			38.80±	5.12		
Living together with elders	yes	30.19±	4.49	1.11	0.266	19.65±	4.73	1.48	0.140	39.77±	5.27	1.74	0.082
	no	29.51±	4.48			18.54±	6.06			38.56±	5.08		
Nursing assesment	yes	30.23±	3.30	0.37	0.709	20.85±	3.58	1.24	0.214	38.15±	7.58	-0.63	0.529
	no	29.75±	4.55			18.86±	5.67			39.09±	5.02		
Necessity of sex education	yes	30.84±	3.85 ^a	18.99	$p<0.001$	19.74±	4.88 ^a	10.10	$p<0.001$	39.81±	5.12 ^a	7.04	0.001
	no	27.20±	5.25 ^b			21.50±	5.97			36.30±	6.25 ^b		
	I don't think about it	27.05±	4.86 ^b			16.20±	6.60 ^b			37.20±	4.58 ^{ab}		

Table 2. Education Needs, Sexual Knowledge, and Attitude by General and Sex-related Characteristic (continued)

(N=231)

Characteristics	category	Education needs			Sexual knowledge			Sexual attitude		
		M± SD	t/F	p	M± SD	t/F	p	M± SD	t/F	p
Acceptance of education	I need it	31.65± 3.72 ^a			20.31± 4.44 ^a			40.39± 5.33 ^a		
	I don't need it	26.77± 3.97 ^b	27.29	p<0.001	17.74± 6.41 ^b	7.23	0.001	36.74± 4.70 ^b	9.53	p<0.001
	I don't think about it	28.22± 4.50 ^b			17.52± 6.30 ^b			37.95± 4.58 ^b		
Sexual function in elderly	I want it	32.54± 4.25 ^a			20.65± 3.35 ^a			41.38± 6.01 ^a		
	I don't want it	29.03± 3.85 ^b	12.66	p<0.001	19.60± 5.20 ^b	4.84	0.009	36.94± 5.14 ^b	11.58	p<0.001
	I don't think about it	29.07± 4.51 ^b			17.90± 6.32 ^b			39.30± 4.32 ^b		

a,b,c = Duncan test

5. Discussions

In the education needs of nurses on the sexuality of the elderly, the nurses needed to know physical, mental, and social changes and the effect of chronic diseases on sexual function with age whereas the elderly needed to know good food and exercise for a healthy sex life and the types of safe sex techniques, which are active and specific [2, 18]. In addition, the elderly needed to know sexual function improvement(71.7%), satisfactory sex life (75.5%), and prevention and treatment of venereal diseases(70.5%) [9]. It suggests that interest in sex education is different between nurses and the elderly. Thus, when nursing assessment and nursing intervention are conducted for elderly patients, the needs of the elderly should be identified and proper education should be provided. Furthermore, the distinction of contents related to sexual education should be considered and various education programs tailored to each elderly's needs be developed and intervened.

The average score of sexual knowledge in nurses was lower than that in the nursing students [22], suggesting that sexual knowledge of nurses on the elderly had not been improved after graduation or nurses did not have education related to sexual knowledge on the elderly. Moreover, most did not conduct nursing assessment on the sexuality of the elderly during hospitalization. In previous studies, only 2% of nurses performed health assessment on sexuality [23] and 70% were not confident and were uncomfortable with its discussion [15]. Similarly, 77.9% of nurses did not mention sex problems in the current study.

The score of sexual attitude reflecting receptiveness was moderate. The male nurses were more receptive than the female nurses, similar to what was shown in the previous studies [2, 18, 24]. Such a difference in sexual attitude by gender may be related to socio-cultural differences among countries. Thus, it is suggested that conservative and traditional Confucian values have an effect on sexuality in Korea.

6. Conclusions

There was a positive correlation among nurses' education needs, knowledge, and attitude on the sexuality of the elderly. Sexual attitude was the most influential factor in education needs and sexual knowledge was the second most influential. Therefore,

considering interest in the life and sexuality of the elderly was increasing due to the growth of an elderly population, knowledge and a desirable view of nurses on sexuality should meet sexual needs. Therefore, all health-related curricula for nurses should preferentially include in-depth education programs dealing with the whole life cycle of human's sexuality, changes in sexuality upon aging, and coping strategy. Furthermore, continuing education should be provided to improve nurses' ability on the subject matter after graduation.

Health officials and all the staff members in the departments, including convalescent hospitals which care for the elderly, need institutional strategies to create education programs related to the sexuality of the elderly, while persistent management through continuing education should be ensured.

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Authors



Eun Kwang Yoo

Professor Eunkwang Yoo, RN, Ph.D teaches Nursing at the School of Nursing, Hanyang University located in Seoul Korea. She began her career as a faculty of Women's Health Nursing in 1982 after receiving B.A. (1978) from Hanyang University, M.S.(1980) in Nursing from Yonsei University, and a Ph.D. in Nursing (1993) from University of California, San Francisco(UCSF) as a Fulbright Doctoral Grantee. She has been a Fulbright Visiting Scholar at Boston College, School of Nursing (2007~2008), a vice president of Korean Fulbright Alumni since 2004 and a Chair of Korean *Sanhujori* Academy since 1999. Professor Yoo, a leading authority on Women's health nursing, especially the pioneer of *Sanhujori*, Korean traditional postpartum care, and IPC (Integrated Postpartum Care), is the author of 'East meets West- Integrated postpartum care - *Sanhujori* & nursing care' and 'Contemporary *Sanhujori*' and co-author of 24 books including 'My mom health JUMP - Joy Ultra Mom Program' & 'My mom health *Sanhujori*' with many other articles. Her recent research interest is to develop a system for connection of health knowledge with consumer's everyday life. She was selected as a Marquis Who's Who in America (2013 Edition) and TOP 100 Health Professionals in America 2013.



Jeoung Sil Lee

Ph.D student in Hanyang University